

IN THE SPECIFICATION:

On page 23, please replace the paragraph at lines 25-26 with the following amended paragraph:

Figure 4. This shows the results of dye-primer DNA sequencing with HiFi Bst
(see SEQ ID NO:1).

On page 23, please replace the paragraph at lines 30-31 with the following amended paragraph:

Figure 5. This shows the results of dye-primer DNA sequencing with HiFi Bst II
(see SEQ ID NO:3).

On page 23, please replace the paragraph at lines 35-36 with the following amended paragraph:

Figure 6. This shows the results of dye-terminator DNA sequencing with HiFi Bst (see SEQ ID NO:1).

On page 24, please replace the paragraph at lines 3-4 with the following amended paragraph:

Figure 7. This shows the results of dye-terminator DNA sequencing with HiFi Bst II (see SEQ ID NO:3).

On page 24, please replace the paragraph at lines 7-13 with the following amended paragraph:

Figure 8. Like Figure 6, this shows the results of four fluorescent dye-labeled terminators DNA sequencing with HiFi Bst (see SEQ ID NO:1). In Figure 8 corrections of the missing or ambiguous bases, according to the known pGEM sequence, are indicated below the letters “N” or below the incorrect base letters.

On page 70, replace the Abstract of the Disclosure with the following:

The invention relates to ~~genetical~~ genetic modification of DNA polymerase to reduce innate selective sequence-related discrimination against incorporation of fluorescent dye-labeled ddCTP and ddATP in the enzymatic reaction for preparation of samples for automated ~~fluorescent~~ fluorescent dye-labeled terminator DNA sequencing. The modified DNA polymerases are more resistant to heat inactivation and are more effective in dideoxynucleotide incorporation than current DNA polymerases.